L Number	Hits		DB	Time stamp
1	16	surface near9 (treat\$9 modif\$9 functional\$9) near9 filler and	USPAT;	2003/01/09 13:19
		(plasma glow discharge) near9 (polymeri\$ation polymeri\$ing	US-PGPUB;	
		polymeri\$1ed graft\$5)	ЕРО; ЛРО;	
			DERWENT;	
			IBM_TDB	
3	3	(amino near3 functional\$9) near9 filler same (epoxy epoxide) near9	USPAT;	2003/01/09 13:23
	~	(resin mo\$11d\$5) same (react\$5 covalent\$5 chemical\$6)		2003/01/09 13.23
		(resit mostros) same (reacts covalents chemicalso)	US-PGPUB;	
			ЕРО; ЛРО;	
			DERWENT;	
2	5	(amina man 2 for 4' 100) 0 CH	IBM_TDB	
2	3	(amino near3 functional\$9) near9 filler same (epoxy epoxide) same	USPAT;	2003/01/09 13:34
		(react\$5 covalent\$5 chemical\$6)	US-PGPUB;	
			ЕРО; ЈРО;	
			DERWENT;	
			IBM_TDB	
4) 0	"4786415" and (epoxy epoxide)	USPAT;	2003/01/09 13:34
			US-PGPUB;	
			EPO; JPO;	
]		DERWENT;	
			IBM_TDB	
5	25	"4786415"		2002/01/00 16:10
j	2.5	4760415	USPAT;	2003/01/09 16:10
			US-PGPUB;	
			ЕРО; ЈРО;	
			DERWENT;	
_			IBM_TDB	
6	0	"4786415" and filler	USPAT;	2003/01/09 13:35
ĺ			US-PGPUB;	
			ЕРО; ЈРО;	
			DERWENT,	
İ			IBM_TDB	
7	0	plasma and introduc\$4 near9 monomer near9 steel near9 pipe	USPAT;	2003/01/09 16:11
		• • • • • • • • • • • • • • • • • • •	US-PGPUB;	2005/01/07 10:11
1			EPO; JPO;	
			DERWENT;	
9	1	plagma magel recetor game et al magel min	IBM_TDB	
'	1	plasma near9 reactor same steel near9 pipe	USPAT;	2003/01/09 16:13
1			US-PGPUB;	
[EPO; JPO;	
	ļ		DERWENT;	
	i		IBM_TDB	
10	1	plasma same steel near9 pipe with monomer	USPAT;	2003/01/09 16:15
		· ·	US-PGPUB;	
l			ЕРО; ЛРО;	
			DERWENT;	
			IBM_TDB	
11	1	plasma and steel near9 pipe with monomer	USPAT;	2003/01/09 16:15
	•	1 by with monomer	-	2003/01/03 10.13
	l		US-PGPUB;	
			EPO; JPO;	
			DERWENT;	
,	201		IBM_TDB	
3	291	plasma same steel near9 pipe	USPAT;	2003/01/09 16:15
1			US-PGPUB;	
			ЕРО; ЛРО;	
	ļ		DERWENT;	
-	İ		IBM_TDB	
2	181	plasma with steel near9 pipe	USPAT;	2003/01/09 16:16
-		Suprim man steet tient's bibe		2003/01/09 10:16
	1		US-PGPUB;	
			EPO; JPO;	
l			DERWENT;	
			IBM_TDB	

-	1		T	· <u> </u>
13	129	plasma near9 steel near9 pipe	USPAT; US-PGPUB;	2003/01/09 16:17
	Ī		EPO; JPO;	
			DERWENT;	
			IBM_TDB	
14	16	(plasma same steel near9 pipe) same inject\$6	USPAT;	2003/01/09 16:18
		(ramine same state pripa) same injustice	US-PGPUB;	2003/01/05 10:10
			EPO; JPO;	
			DERWENT;	-
İ			IBM_TDB	
15	10	(plasma with steel near9 pipe) with inject\$6	USPAT;	2003/01/09 16:27
		G	US-PGPUB;	2003/01/07 10:27
	1		EPO; JPO;	
	Ì		DERWENT;	
			IBM_TDB	
16	0	"5843789" and steel	USPAT;	2003/01/09 16:28
			US-PGPUB;	2003/01/03 10.28
			ЕРО; ЛРО;	
			DERWENT;	
			IBM_TDB	
17	8	"5843789"	USPAT;	2003/01/09 16:29
1		3013707	US-PGPUB;	2003/01/09 10.29
•			EPO; JPO;	ĺ
			DERWENT;	
18	0	"6428861" and steel	IBM_TDB	2002/01/00 16:20
1.0	"	0428801 and sieci	USPAT;	2003/01/09 16:30
			US-PGPUB;	
			EPO; JPO;	
			DERWENT;	
19	2	"6428861"	IBM_TDB	2002/01/00 17.22
17		0428801	USPAT;	2003/01/09 17:22
			US-PGPUB;	
			ЕРО; ЛРО;	
			DERWENT;	
20	3746	(migrayaya (radio none) fraguenas)) none a none none a la como	IBM_TDB	2002/01/00 17.24
20	3740	(microwave (radio near2 frequency)) near9 power near9 plasma	USPAT;	2003/01/09 17:24
]		US-PGPUB;	
			ЕРО; ЛРО;	
			DERWENT;	
21	275	((miorowova (radio noor) fraguesay)) - and	IBM_TDB	2002/01/00 15 25
21	213	((microwave (radio near2 frequency)) near9 power near9 plasma) near9 watt	USPAT;	2003/01/09 17:37
		noa / watt	US-PGPUB;	
			ЕРО; ЛРО;	
			DERWENT;	
22	34	(((microwave (radio near2 frequency)) near9 power near9 plasma)	IBM_TDB	2002/01/00 17:05
	34	near9 watt) near9 ("10" "40")	USPAT;	2003/01/09 17:25
		near wall) hears (10 40")	US-PGPUB;	
			EPO; JPO;	
			DERWENT;	
23	30	((microwaya (radio near) fraguenas)) = a==0 =	IBM_TDB	2002/01/00 20 00
4.5	30	((microwave (radio near2 frequency)) near9 power near9 plasma) near9 ("10" "40") near3 watt	USPAT;	2003/01/09 20:00
-		neary (10 40) nears wall	US-PGPUB;	
		•	EPO; JPO;	•
			DERWENT;	
24	384	(nlasma alaw disaharaa) maan0 (m-1in-4iin-	IBM_TDB	2002/01/02 17 27
44	384	(plasma glow discharge) near9 (polymeri\$ation polymeri\$ing	USPAT;	2003/01/09 17:36
		polymeri\$1ed graft\$5) near9 power	US-PGPUB;	
			EPO; JPO;	
			DERWENT;	İ
			IBM_TDB	

25	354	plasma near9 (polymeri\$ation polymeri\$ing polymeri\$led graft\$5)	USPAT;	2003/01/09 17:36
1	r		***	
1		near9 power	US-PGPUB;	
			ЕРО; ЛРО;	
			DERWENT;	
0.5			IBM_TDB	
26	43	(plasma near9 (polymeri\$ation polymeri\$ing polymeri\$1ed	USPAT;	2003/01/09 17:37
		graft\$5) near9 power) near9 watt	US-PGPUB,	
			ЕРО; ЈРО;	
			DERWENT;	
			IBM_TDB	
27	2	4374717.pn.	USPAT;	2003/01/09 20:00
			US-PGPUB;	
			EPO; JPO;	
1			DERWENT;	
	250		IBM_TDB	
-	350	(yoon roh).in. and plasma	USPAT;	2003/01/08 19:10
			US-PGPUB;	
			ЕРО; ЛРО;	
			DERWENT;	
	•	((soom moon? too ho) (sob moon? 'soon')	IBM_TDB	2002/01/02
-	1	((yoon near3 tae-ho) (roh near3 joon)).in. and plasma	USPAT;	2003/01/08 19:04
			US-PGPUB;	
			EPO; JPO;	
			DERWENT,	
	9	(Iranoniu) on and mlasses	IBM_TDB	2002/01/00 10 00
-	9	(kwangju).as. and plasma	USPAT;	2003/01/08 19:08
ĺ			US-PGPUB;	
			ЕРО; ЛРО;	
			DERWENT;	
	34	((yoon rob) in and plasma) and ailian	IBM_TDB	2002/01/00 10 00
-	34	((yoon roh).in. and plasma) and silica	USPAT;	2003/01/08 19:08
			US-PGPUB;	
			ЕРО; ЛРО;	
			DERWENT; IBM_TDB	
_	1512	(kwangju).as.	USPAT;	2003/01/08 19:08
		(Krangju).us.	US-PGPUB;	2003/01/08 19.08
Ī			EPO; JPO;	
			DERWENT;	
			IBM_TDB	
-	34	(((yoon roh).in. and plasma) ((kwangju).as.)) and plasma and silica	USPAT;	2003/01/08 19:10
		((()) and planting ((investigle) and planting and billion	US-PGPUB;	2003/01/06 17:10
			EPO; JPO;	
			DERWENT;	
į	İ		IBM_TDB	Ì
_	16091	(yoon roh).in.	USPAT,	2003/01/08 19:10
-	*		US-PGPUB;	20000010010.10
			EPO; JPO;	
			DERWENT;	
			IBM TDB	
-	17557	((kwangju).as.) ((yoon roh).in.)	USPAT;	2003/01/08 19:10
	-	w / · · / \	US-PGPUB;	
	į		ЕРО; ЛРО;	
			DERWENT;	
			IBM TDB	
-	121	(((kwangju).as.) ((yoon roh).in.)) and plasma same (silica (silicon	USPAT;	2003/01/08 19:13
		(dioxide oxide)))	US-PGPUB;	
		<i>""</i>	EPO; JPO;	
	,		DERWENT;	
			IBM TDB	

-	1	(((kwangju).as.) ((yoon roh).in.)) and plasma same (silica (silicon (dioxide oxide))) same modif\$6	USPAT; US-PGPUB;	2003/01/08 19:12
			ЕРО; ЈРО;	
			DERWENT;	
			IBM_TDB	
-	102	((plasma near9 polymeri\$8) same (silica (silicon (dioxide oxide))))	USPAT;	2003/01/08 19:20
		same modif\$8	US-PGPUB;	
ļ			EPO; JPO;	
ľ			DERWENT;	
	56	((plasma near9 polymeri\$8) same (silica (silicon (dioxide oxide))))	IBM_TDB	2002/01/00 10 22
	50	same (surface near3 modif\$8)	USPAT;	2003/01/08 19:23
	ĺ	Same (surface near 5 modifies)	US-PGPUB; EPO; JPO;	
			DERWENT;	
			IBM TDB	
-	1	(((plasma near9 polymeri\$8) same (silica (silicon (dioxide oxide)))	USPAT;	2003/01/08 19:20
) same (surface near3 modif\$8)) same (particle particulate)	US-PGPUB;	2003/01/00 17:20
		, , , , , , , , , , , , , , , , , , , ,	ЕРО; ЛРО;	
			DERWENT;	
			IBM_TDB	
-	358	(plasma near9 polymeri\$8) same (silica (silicon near2 (dioxide	USPAT;	2003/01/08 19:27
		oxide)))	US-PGPUB;	
			EPO; JPO;	
-			DERWENT;	
			IBM_TDB	
-	20	((plasma near9 polymeri\$8) same (silica (silicon near2 (dioxide	USPAT;	2003/01/08 19:20
		oxide))))) same (particle particulate)	US-PGPUB;	
1			ЕРО; ЈРО;	
			DERWENT;	
	10	(//1	IBM_TDB	
-	18	((plasma near9 polymeri\$8) same (silica (silicon near2 (dioxide	USPAT;	2003/01/08 19:20
		oxide))))) same modif\$8	US-PGPUB;	
			EPO; JPO;	
			DERWENT;	
_	13	(plasma near9 polymeri\$8) and (silica (silicon near2 (dioxide	IBM_TDB USPAT;	2003/01/08 19:24
		oxide))) near9 (surface near3 modif\$8)	US-PGPUB;	2003/01/08 19.24
		omac))) near (surface near 3 mountag)	EPO; JPO;	
			DERWENT;	
1			IBM_TDB	
-	5	((plasma near9 polymeri\$8) same (silica (silicon near2 (dioxide	USPAT;	2003/01/08 19:24
1		oxide)))) same (surface near3 modif\$8)	US-PGPUB;	2003/01/00 17:21
			ЕРО; ЛРО;	
			DERWENT;	
			IBM_TDB	
-	4	427/488.ccls. and (silica (silicon near2 (dioxide oxide))) near9	USPAT;	2003/01/08 19:28
		modif\$9	US-PGPUB;	
			ЕРО; ЈРО;	
	ļ		DERWENT;	
		427/49911 (-11:(-11:(-11:(-11:(-11:(-11:(-11:(-11:(-11:(-11:(-11:	IBM_TDB	
_	4	427/488.ccls. and (silica (silicon near5 (dioxide oxide))) near9	USPAT;	2003/01/08 19:34
		modif\$9	US-PGPUB;	
•		er e	EPO; JPO;	
			DERWENT;	
-	16078	plasma and (silica (silicon near5 (dioxide oxide))) and (amine	IBM_TDB	2002/01/00 00:20
	13076	diamino\$9 allyl\$1amine pyrrole allyl\$1mercaptan allyl\$1alcohol)	USPAT; US-PGPUB;	2003/01/09 09:30
		anyloralism pyrrole anylorine captain anyloralconor)	EPO; JPO;	
			DERWENT;	
			IBM TDB	
	L			

-	552		USPAT;	2003/01/08 19:37
		(dioxide oxide))) and (amine diamino\$9 allyl\$1amine pyrrole	US-PGPUB;	
		allyl\$1mercaptan allyl\$1alcohol)	EPO; JPO;	
	1		DERWENT;	
			IBM_TDB	
-	539	(and (and the contract (and the contract))	USPAT;	2003/01/08 19:38
ļ		allyl\$1amine pyrrole allyl\$1mercaptan allyl\$1alcohol) same plasma	US-PGPUB;	
			ЕРО; ЈРО;	
	İ		DERWENT;	
			IBM_TDB	
-	274	(Carrier (Carrier (Carrier of Mach))) Starte (Starte C Starte) Mild	USPAT;	2003/01/09 09:55
		(amine diamino\$9 allyl\$1amine pyrrole allyl\$1mercaptan	US-PGPUB;	
		allyl\$1alcohol) same plasma	EPO; JPO;	
		•	DERWENT;	
			IBM_TDB	
-	44	(Started Strong Country)	USPAT;	2003/01/08 19:44
		same (amine diamino\$9 allyl\$1amine pyrrole allyl\$1mercaptan	US-PGPUB,	
	ĺ	allyl\$1alcohol) same plasma	ЕРО; ЛРО;	
	ļ		DERWENT;	
			IBM_TDB	
-	18	(silica (silicon near5 (dioxide oxide))) same (surface substrate) and	USPAT;	2003/01/08 19:45
		(amine diamino\$9 allyl\$1amine pyrrole allyl\$1mercaptan	US-PGPUB;	2003/01/08 19.43
		allyl\$1alcohol) with plasma with polymeri\$9	EPO, JPO;	
	1	Parameter Man parameter porjection	DERWENT;	
			IBM_TDB	
_	0	(plasma dicharge glow) same (polymeri\$9 graft\$5) same (monomer		2002/01/00 00 22
		amine diamino\$9 allyl\$1amine pyrrole allyl\$1mercaptan	USPAT;	2003/01/09 09:32
		allyl\$1alcohol) and (silica (silicon near5 (dioxide oxide)))	US-PGPUB;	
	İ	anyth falcollol) and (sinca (sincoll hear) (dioxide oxide)))	EPO; JPO;	
			DERWENT;	
_	3764	(cilica (cilican near5 (diavide avide))) = ==0 (==+i-1====+i-1====+i-1====+i-1====+i-1====+i-1====+i-1====+i-1====+i-1====+i-1=====+i-1=====+i-1=====+i-1=====+i-1=====+i-1==========	IBM_TDB	*****
	3704	(silica (silicon near5 (dioxide oxide))) near9 (particle particulate) same surface near9 (treat\$9 modif\$9)	USPAT;	2003/01/09 10:56
	ĺ	same surface neary (deargy modify)	US-PGPUB;	
[ЕРО; ЛРО;	
			DERWENT;	
1	409	(/olling /olling on E/1) 11 11 11 11 11	IBM_TDB	İ
] -	409	((silica (silicon near5 (dioxide oxide))) near9 (particle particulate)	USPAT;	2003/01/09 10:00
		same surface near9 (treat\$9 modif\$9)) and (amine diamin\$9	US-PGPUB;	
		allyl\$1amine pyrrole allyl\$1mercaptan allyl\$1alcohol) and (plasma	EPO; JPO;	
		glow discharge)	DERWENT;	İ
			IBM_TDB	
-	19	((silica (silicon near5 (dioxide oxide))) near9 (particle particulate)	USPAT;	2003/01/09 10:20
		same surface near9 (treat\$9 modif\$9)) and (amine diamin\$9	US-PGPUB;	
]	allyl\$1amine pyrrole allyl\$1mercaptan allyl\$1alcohol) and (plasma	ЕРО; ЛРО;	
	j	glow discharge) near9 (polymeri\$1ation polymer\$2ing graft\$5)	DERWENT,	
			IBM_TDB	
-	2	"2000143230"	USPĀT;	2003/01/09 10:09
			US-PGPUB;	
			ЕРО; ЛРО,	
	ĺ		DERWENT;	
			IBM TDB	
-	5270	(silica (silicon near5 (dioxide oxide))) near9 (particle particulate	USPAT;	2003/01/09 10:19
		bead) near9 (treat\$9 modif\$9)	US-PGPUB;	
			EPO; JPO;	
!			DERWENT,	ļ
			IBM TDB	
-	0	((silica (silicon near5 (dioxide oxide))) near9 (particle particulate	USPAT;	2003/01/09 10:21
		bead) near9 (treat\$9 modif\$9)) and (diamino\$1propane	US-PGPUB;	2003/01/07 10.21
	†	diamino\$1alkane allyl\$1amine pyrrole allyl\$1mercaptan	EPO; JPO;	
		allyl\$1alcohol) and (plasma glow discharge) near9 (polymeri\$1ation	DERWENT;	
		polymer\$2ing graft\$5)	IBM_TDB	Ī
		J / O. O	מתו זאותי	

-	51		USPAT;	2003/01/09 10:22
		allyl\$1mercaptan allyl\$1alcohol) same (plasma glow discharge)	US-PGPUB;	
		near9 (polymeri\$1ation polymer\$2ing graft\$5)	EPO; JPO;	
			DERWENT;	
			IBM_TDB	
-	3321	(epoxy glycidyl) near5 resin same (amin\$1 mercapto hydroxy\$1)	USPAT;	2003/01/09 10:49
		same (covalent\$6 chemical\$4)	US-PGPUB;	
			ЕРО, ЛРО,	
1			DERWENT;	
			IBM_TDB	
-	533	(epoxy glycidyl) near5 resin same (amin\$1 mercapto hydroxy\$1)	USPAT;	2003/01/09 10:50
1		same (covalent\$6 chemical\$4) near5 (react\$8 bond\$6 attach\$4)	US-PGPUB;	2003/01/07 10.50
		' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	EPO; JPO;	
			DERWENT;	
_	146	(approxy already) maged marin was 0 (amin \$1 may at 1 1 01)	IBM_TDB	
	140	(epoxy glycidyl) near9 resin near9 (amin\$1 mercapto hydroxy\$1)	USPAT;	2003/01/09 10:51
	1	near9 (covalent\$6 chemical\$4) near9 (react\$8 bond\$6 attach\$4)	US-PGPUB;	
			EPO; JPO;	
			DERWENT,	
			IBM_TDB	
-	148	(epoxy glycidyl) near9 (mo\$11d\$3 resin) near9 (amin\$1 mercapto	USPĀT;	2003/01/09 10:53
		hydroxy\$1) near9 (covalent\$6 chemical\$4) near9 (react\$8 bond\$6	US-PGPUB;	
		attach\$4)	ЕРО; ЛРО;	
			DERWENT;	
	1		IBM_TDB	
-	2	((epoxy glycidyl) near9 (mo\$1ld\$3 resin) near9 (amin\$1 mercapto	USPAT;	2003/01/09 10:55
	_	hydroxy\$1) near9 (covalent\$6 chemical\$4) near9 (react\$8 bond\$6	US-PGPUB;	2003/01/09 10.33
	İ	attach\$4)) not ((epoxy glycidyl) near9 resin near9 (amin\$1 mercapto		
		hydroxy(1) noor() (correlant(6 aboming(64) man(6) (min(5) mercapto	ЕРО; ЛРО;	
	1	hydroxy\$1) near9 (covalent\$6 chemical\$4) near9 (react\$8 bond\$6	DERWENT;	
	2250	attach\$4))	IBM_TDB	
-	3358	surface near9 (treat\$9 modif\$9) near9 (filler particle particulate)	USPAT;	2003/01/09 11:12
		and (silica (silicon near5 (dioxide oxide))) and mo\$1ld\$4	US-PGPUB;	
			ЕРО, ЛРО,	
			DERWENT;	
			IBM TDB	
-	58	surface near9 (treat\$9 modif\$9) near9 (silica (silicon near5 (dioxide	USPĀT;	2003/01/09 11:01
	i	oxide))) near9 filler same mo\$1ld\$4	US-PGPUB;	
			ЕРО; ЛРО;	
	1		DERWENT;	
			IBM_TDB	
-	19	(surface near9 (treat\$9 modif\$9) near9 (silica (silicon near5	TTOD	2003/01/00 11:01
	-	(dioxide oxide))) near9 filler same mo\$11d\$4) same epoxy	USPAT;	2003/01/09 11:01
		(US-PGPUB;	
			EPO; JPO;	
			DERWENT;	
_	605	minford moon() (torott() 11000) 0 (011	IBM_TDB	
-	695	surface near9 (treat\$9 modif\$9) near9 (filler particle particulate)	USPAT;	2003/01/09 12:21
	†	and (silica (silicon near5 (dioxide oxide))) and mo\$1ld\$4 and	US-PGPUB;	
		(plasma glow discharge)	ЕРО; ЛРО;	
	ļ		DERWENT,	
	1		IBM_TDB	
-	32	surface near9 (treat\$9 modif\$9) near9 (filler particle particulate)	USPAT:	2003/01/09 11:32
	1	near9 (plasma glow discharge) and (silica (silicon near5 (dioxide	US-PGPUB;	
		oxide))) and mo\$11d\$4	EPO; JPO;	
		///	DERWENT;	
_	0	curfore more) (treaten me 1:00) Cli	IBM_TDB	*****
-] "	surface near9 (treat\$9 modif\$9) near9 filler same (plasma glow	USPAT;	2003/01/09 11:41
		discharge) near9 (polymeri\$ation polymeri\$ing polymeri\$1ed	US-PGPUB;	
		graft\$5) and (silica (silicon near5 (dioxide oxide)))	ЕРО; ЛРО;	
			DERWENT; IBM_TDB	

				T
-	4	(bothmentalism	USPAT;	2003/01/09 12:21
		polymeri\$ing polymeri\$1ed graft\$5) and (silica (silicon near5	US-PGPUB;	
]		(dioxide oxide)))	ЕРО; ЛРО;	
			DERWENT;	ļ
	1		IBM_TDB	İ
-	4	see and the see of t	USPAT;	2003/01/09 11:45
		discharge) near9 (polymeri\$ation polymeri\$ing polymeri\$1ed	US-PGPUB;	
		graft\$5) and (silica (silicon near5 (dioxide oxide)))	EPO; JPO;	
			DERWENT;	
			IBM_TDB	
-	2	rotat\$5 near9 reactor near9 plasma same (parcticle particulate)	USPAT;	2003/01/09 11:47
			US-PGPUB;	
	İ		ЕРО; ЛРО;	
ļ			DERWENT;	
			IBM_TDB	
-	13	provide Brown approximation (properties Brown appointing	USPAT;	2003/01/09 11:50
		(polymeri\$ation polymeri\$ing polymeri\$1ed graft\$5) same (filler	US-PGPUB;	
		parcticle particulate powder\$4)	ЕРО; ЛРО;	
			DERWENT;	
			IBM_TDB	
-	1	surface near9 (treat\$9 modif\$9) near9 filler with (plasma glow	USPAT;	2003/01/09 12:23
		discharge) near9 (polymeri\$ation polymeri\$ing polymeri\$1ed	US-PGPUB;	
	1	graft\$5)	ЕРО; ЈРО;	
			DERWENT;	
			IBM_TDB	
-	15	filler with (plasma glow discharge) near9 (polymeri\$ation	USPAT;	2003/01/09 17:33
		polymeri\$ing polymeri\$1ed graft\$5)	US-PGPUB;	
			EPO; JPO;	
j			DERWENT;	
			IBM TDB	

DERWENT-ACC-NO: 1993-402433 Page 1 of 2

DERWENT-ACC-

1993-402433

NO:

DERWENT-

WEEK:

199350

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TITLE

Polymeric compsn. - contains polyolefin and modified inorganic filler, useful in

mfr. of domestic and industrial articles

INVENTOR: MATKOVSKII, P E; PAPOYAN, A T; RUDAKOV, V

PATENT-

MATKOVSKII, P E PAPOYAN, A T RUDAKOV, V M AS USSR CHEM

ASSIGNEE:

PHYS INST[ASCHR]

PRIORITY-DATA: 1990SU-4880079 (November 5, 1990)

PATENT-FAMILY:

PUB-NO PUB-DATE

LANGUAGE PAGES MAIN-IPC

SU 1776671 A1 November 23, 1992 N/A

005 C08L 023/02

APPLICATION-DATA:

PUB-NO

APPL-DESCRIPTOR APPL-NO

APPL-DATE

SU 1776671A1 N/A

1990SU-4880079 November 5, 1990

INT-CL (IPC): C08F292/00, C08K009/04, C08L023/02

ABSTRACTED-PUB-NO: SU 1776671A

BASIC-ABSTRACT:

The compsn. contains in wt.%: modified inorganic filler 20-40; and polyolefin the rest. The <u>filler is modified by polymerisation of saturated and unsaturated hydrocarbons in high-frequency discharge onto the surface of inorganic particles in 0.048-2.120 pts.wt. of polymer to 17.88-39.24 pts.wt. of inorganic filler.</u>

In the examples the filler is from the group contg. technical carbon, graphite, calcite, tafa, kaolin, silicagel, etc. The modification is in thermostat reactor with outer electrodes connected by flexible screened conductors of length 40 cm to generator of frequency 40.68 MHz. Pressure is reduced to 1 Pa by vacuum-pump, the reactor is filled with argon to 0.1 MPa, then argon is pumped out, and the discharge of specific power 0.53 W/cu.cm started in the zone of 0.2 l; ethylene at 20 deg.C in 30 mins. is fed into the discharge zone by capillary at the rate of 0.13 m.mol/min. Modified filler is combined with high-pressure polyethylene in laboratory microrollers at temp. 125 +/-5 deg.C in 5 mins.

USE/ADVANTAGE - Used in filled polyolefin compsns. in the industry of plastic materials that are useful in prodn. of domestic and industrial articles. The physico-mechanical properties are improved. Bul.43/23.11.92

Syntactic foams are produced by dispersing microscopic rigid, hollow or solid particles in a liquid or semi-liquid thermosetting resin and then hardening the system by curing. The particles are generally spheres or microballoons of carbon, polystyrene, phenolic resin, urea-formaldehyde resin, glass, or silica, ranging from 20 to 200 micrometers in diameter. Commercial microspheres have specific gravities ranging from 0.033 to 0.33 for hollow spheres and up to 2.3 for solid glass spheres. The liquid resins used are the usual resins used in molding reinforced articles, e.g., epoxy resin, polyesters, and urea-formaldehyde resins.

PAT-NO:

JP401113454A

DOCUMENT-IDENTIFIER: JP 01113454 A

TITLE:

PRODUCTION OF EPOXY COMPOSITION

PUBN-DATE:

May 2, 1989

INVENTOR-INFORMATION:

NAME

COUNTRY

HAYASHI, TAKAO

ASSIGNEE-INFORMATION:

NAME

COUNTRY

MATSUSHITA ELECTRIC WORKS LTD N/A

APPL-NO.

JP62271051

APPL-DATE: October 26, 1987

INT-CL (IPC):

C08L063/00, C08K009/06

US-CL-CURRENT: <u>523/213</u>

ABSTRACT:

PURPOSE: To obtain an epoxy resin composition which can give a cured product of a low modulus, by surface-treating a silica powder to be added to an epoxy resin molding material as a filler by reaction with an epoxysilane and then with an aminosilane and adding this filler to an epoxy resin.

CONSTITUTION: A surface-treated silica [A] is added to an epoxy resin in the production of an epoxy resin composition including a step of adding a silica powder to an epoxy resin, said surfacetreated silica [A] is one formed by reacting the surface of a silica powder with an epoxysilane of formula I and then with an aminosilane of formula II and hydrolyzing the alkoxy groups of the aminosilane. In formulas I and II, R is CH3 or C2H5, R1 is a radical containing an epoxy group, and R2 is a radical containing an amino group.

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DOCUMENT-IDENTIFIER: JP 63130625 A

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PAT-NO:

JP363130625A

DOCUMENT-

IDENTIFIER:

JP 63130625 A

TITLE:

EPOXY RESIN COMPOSITION FOR SEALING SEMICONDUCTOR

DEVICE

PUBN-DATE:

June 2, 1988

INVENTOR-INFORMATION:

NAME

COUNTRY

FUJIEDA, SHINETSU

HIRAI, HISASHI

MATSUMOTO, KAZUTAKA

ASSIGNEE-INFORMATION:

NAME

COUNTRY

TOSHIBA CORP N/A

APPL-NO:

JP61276634

APPL-DATE: November 21, 1986

INT-CL (IPC):

C08G059/18, C08G059/18, C08G059/18, C08K005/54, C08K009/06,

C08L063/00, H01L023/30

US-CL-

CURRENT:

<u>523/210</u>

ABSTRACT:

PURPOSE: To obtain the title composition excellent in heat shock resistance and adhesion of a lead frame to an element, containing an inorganic filler treated with a specified surface treating agent.

CONSTITUTION: 100pts.wt. inorganic filler (a) (e.g., silica) is treated with 0.1 ~ 5 pts.wt. surface treating agent (b) comprising a silane coupling agent (i) (e.g., an epoxy silane coupling agent), a liquid organosiloxane (ii) of a viscosity (20°C) of 500 ~ 1,000,000cP and 0.05 ~ 10pts.wt., per 100pts.wt. component (ii), radical polymerization initiator (iii) (e.g., benzoyl peroxide) to obtain a surface-treated inorganic filler (B). A composition (A) comprising an epoxy resin, a curing agent (accelerator), a mold release, etc., is mixed with component B to obtain the title composition. This composition can be cured by heating to 150°C or above.

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DOCUMENT-IDENTIFIER: JP 01185316 A

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PAT-NO:

JP401185316A

DOCUMENT-IDENTIFIER: JP 01185316 A

TITLE:

EPOXY RESIN MOLDING MATERIAL

PUBN-DATE:

July 24, 1989

INVENTOR-INFORMATION:

NAME

COUNTRY

IKEDA, KOJI

KAGAWA, HIROHIKO

TORII, MUNETOMO

ASSIGNEE-INFORMATION:

NAME

COUNTRY

MATSUSHITA ELECTRIC WORKS LTD N/A

APPL-NO:

JP63008002

APPL-DATE: January 18, 1988

INT-CL (IPC):

C08G059/40, C08L063/00

US-CL-CURRENT: 523/456

ABSTRACT:

PURPOSE: To obtain the title low-stress material of excellent moldability, by mixing an epoxy resin with an inorganic filler, a silicone rubber and, optionally, a crosslinking agent, a curing agent, a cure accelerator, a mold release, a colorant, etc.

CONSTITUTION: A curable epoxy resin (A) having at least two epoxy groups in the molecule is mixed with 30-90wt.% inorganic filler (B) (e.g., silica) option ally surface-treated with a coupling agent and, optionally, 0.5-10wt.% silicone rubber (C) surface-treated with a coupling agent in an amount of 0.05-5wt.% [in terms of the total amount of this coupling agent and the coupling agent used in the surface treatment of component (B)], based on the obtained material, and, optionally, a crosslinking agent, a curing agent, a cure accelerator, a mold release, a colorant, etc., (D).

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DERWENT-

ACC-NO:

2000-406990

DERWENT-

WEEK:

200050

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TITLE:

Modification of spherical shaped silica particle surface for use as catalyst support,

involves coating the surface of silica particles with a graft polymer layer

PATENT-ASSIGNEE: HARAGUCHI T[HARAI], SHOKUBAI KASEI KOGYO KK[NISH]

PRIORITY-DATA: 1998JP-0319573 (November 10, 1998)

PATENT-FAMILY:

PUB-NO

PUB-DATE LANGUAGE PAGES MAIN-IPC

JP 2000143230 A May 23, 2000 N/A

006

C01B 033/18

APPLICATION-DATA:

PUB-NO

APPL-DESCRIPTOR APPL-NO

APPL-DATE

JP2000143230A N/A

1998JP-0319573 November 10, 1998

INT-CL

B01J002/00, B01J019/08, C01B033/18, C08F292/00, C08K003/36, C08K009/04,

(IPC):

C08L101/00

ABSTRACTED-PUB-NO: JP2000143230A

BASIC-ABSTRACT:

NOVELTY - The surface of spherical shaped silica particle is modified by coating with a graft polymer layer. The silica particle has a bulk specific gravity of 0.8-1.2 g/ml, pore volume of 0.3 ml/g or less, abrasion strength of 10 weight percentage/15 hours or less and average particle diameter of 20-300 mu m.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for manufacture of surface modified spherical particle. The surface of spherical shaped silica particles is irradiated with plasma without exposing the particle to atmosphere. Then, the silica particles are made to contact with monomer and graft polymerization was carried out to form a monomer layer on the surface of silica particle.

USE - As catalyst support.

ADVANTAGE - The surface of silica particle is modified by providing a polymer layer by graft polymerization reaction. Therefore, the need of silane coupling process is eliminated.

CHOSEN-DRAWING: Dwg.0/1

DERWENT-CLASS: A14 E36 G02